

AMENDMENTS TO THE ABSTRACT:

Please insert the following abstract after the claims.

ABSTRACT

In the present invention, pre-distortion of drive signal and generation of bias signal to a power amplifier are both controlled dependent on an instantaneous size of the input signal, for producing a predetermined gain characteristics. Preferably, the bias signal is kept low in amplitude ranges having a high probability to occur, thus giving a high efficiency, and is allowed to increase towards higher amplitudes, preferably all the way to the maximum amplitude. The pre-distorted drive signal is preferably higher than the input signal in the high-efficiency ranges. Preferably, the drive signal is predominantly composed of low-order components. In cases where signal paths of bias signal and drive signal differs significantly, inverse filtering is applied to ensure the simultaneousness at the input of the amplitude element.